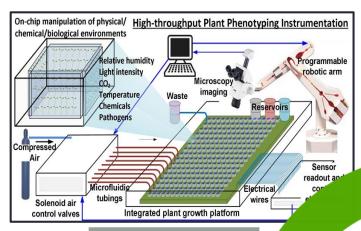
# Division of Biological Infrastructure

- Bio-AC meeting, April 2016
  - Presenter: Dr. Jennifer W. Weller, ABI Program Officer

"Our mission is to support current activities by Biologists funded across the Directorate, and anticipate what their needs will be 5 years from now."

"Progress in science depends on new techniques, new discoveries and new ideas, probably in that order" Sydney Brenner



### **Ecosynth**

open-source 3D tools for field ecology, conservation biology, and citizen scientists.

G to P

Instrumentation

**Shared Data Platforms** 

ChromNet EZH2 H1-hESC



Rules of Life

H3K4me3
ChIP-seq

SUZ12
ChIP-seq

H3K27me3
ChIP-seq

CT8P2
ChIP-seq

SUZ12
ChIP-seq

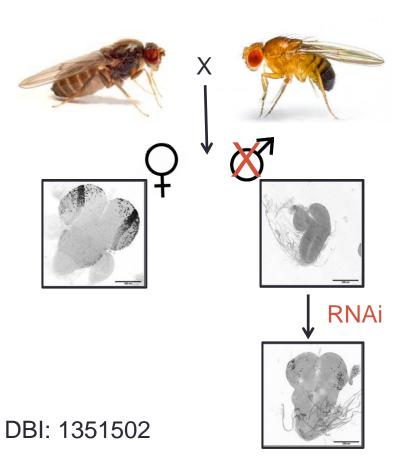
SUZ12
ChIP-seq

Phenotype RCN
Open Science Infrastructure

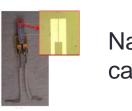
**Modeling** 

## Infrastructure Transforming Basic Research

#### Interspecies sex-specific lethality



Bio-sized sensors



NanAphid carbohydrate sensor

PlantChip – 3D structure images



DBI: 1455544 and 1353819

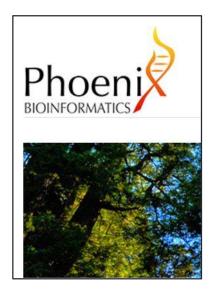
# Sustaining Infrastructure - the Future



- Open Data/Open Science
  - 468 journal partners
  - 44,000 authors
  - 39,000 data files
  - 1.28 million downloads
- Funding: Depositor fee







- Community Databases\*
  - TAIR (plant biology): 10 unique visitors per day, 3 page-views each
  - BioCyc (regulatory and metabolic networks): 1060 unique visitors/day, 5 page-views each.
- Funding: Subscription fee through Phoenix

\*From <a href="http://tair.org.hypestat.com/">http://tair.org.hypestat.com/</a> and <a href="http://biocyc.org.hypestat.com/">http://biocyc.org.hypestat.com/</a>